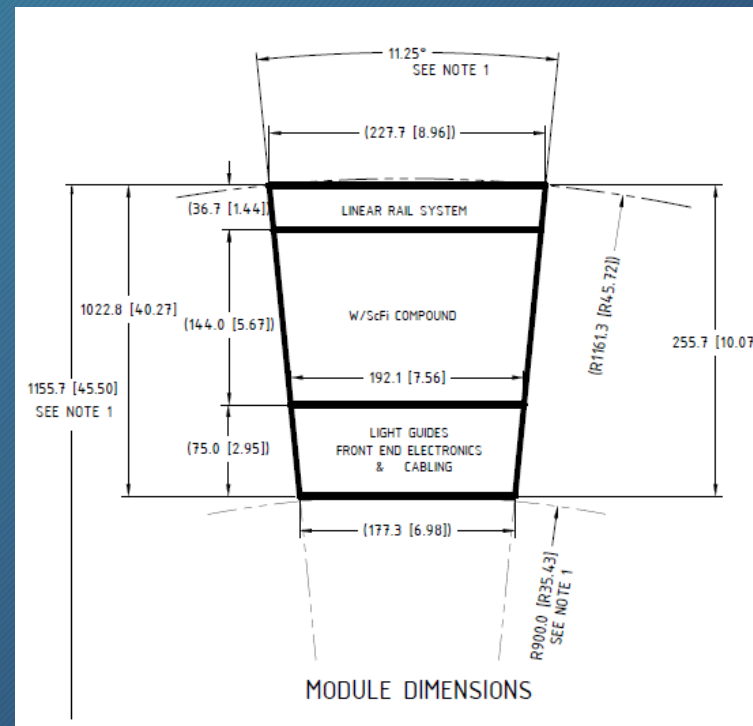
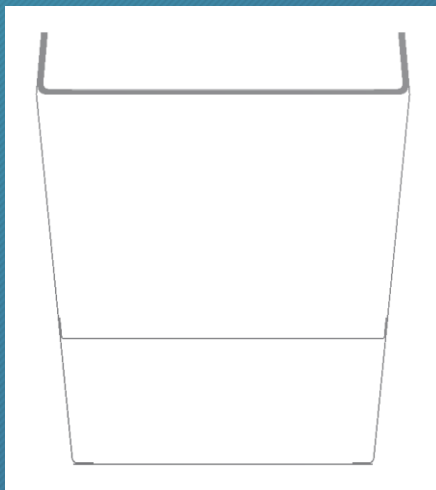


EMCal Design

EMCal Aluminum Box

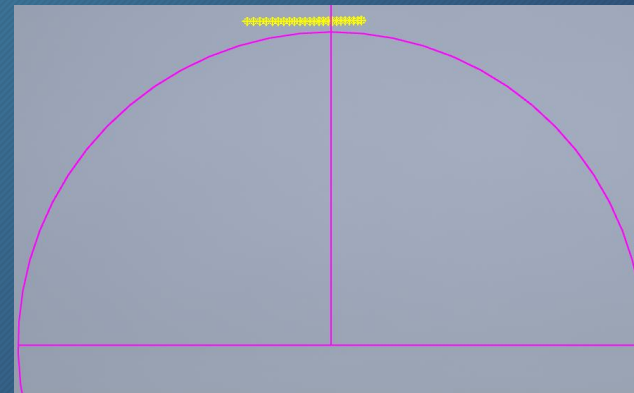
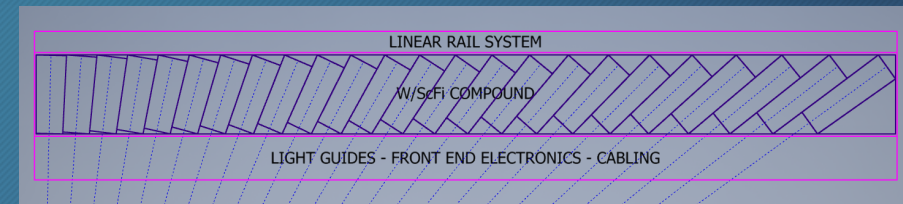
- Side and bottom thickness? (30 thou)
- Top thickness? (1/8 in)
- Rail Hight? (Max 1.315 thou)
- Gap between boxes? (1/8 in)



1/17/2017

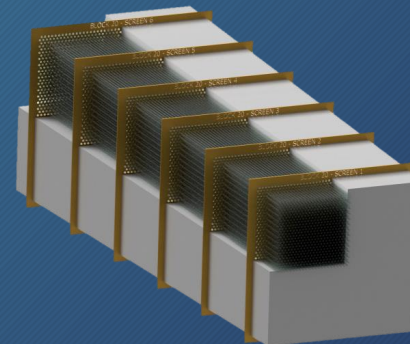
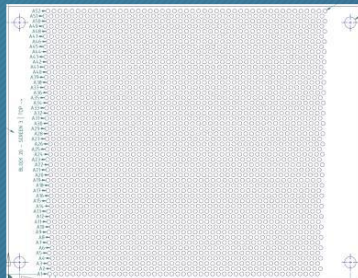
EMCal Blocks

- Constrain Sid90P to be equal? (Yes)
- Gaps between blocks? (15 thou)
- Gaps between the box and the blocks? (15 thou)
- Gaps for the bottom/top of the blocks? (Min ~ 55 thou)
- Distance from the center of the EMCal to the focal point of the blocks?
 - Axially? (Max ~ 0.27 in)
 - Point to Point? (Max ~ 0.36 in)
 - Radially? (Max ~ 1.02 in)

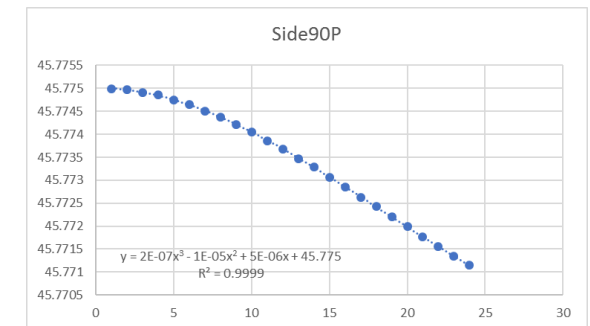
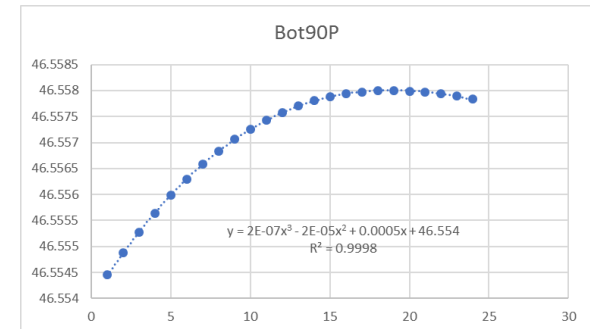
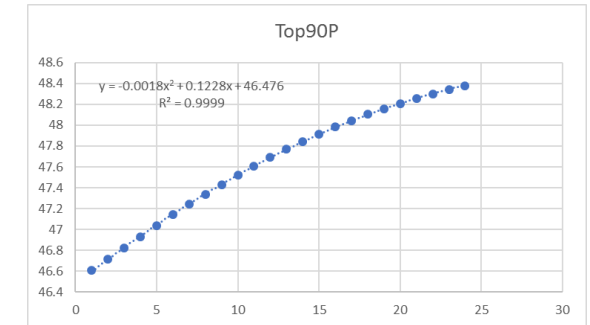
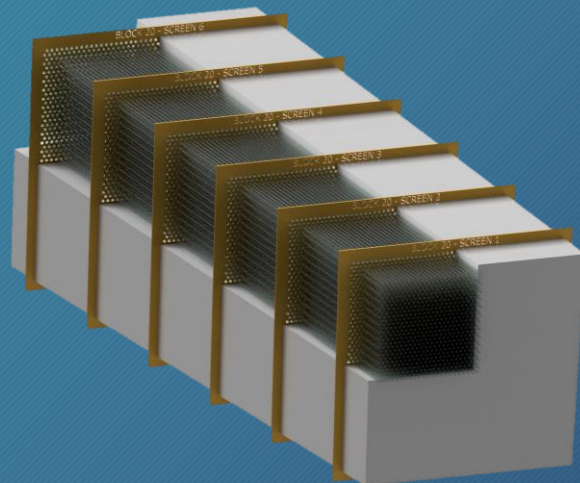
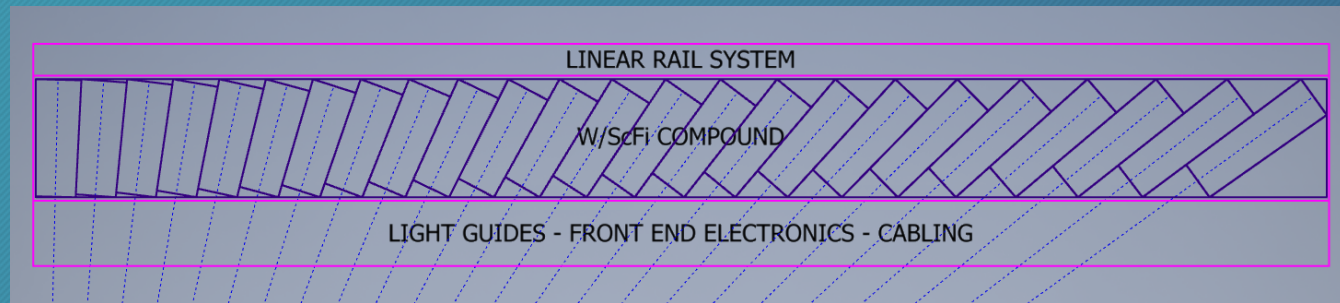


EMCal Screens

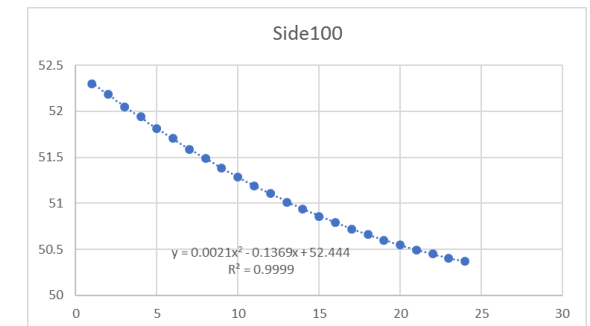
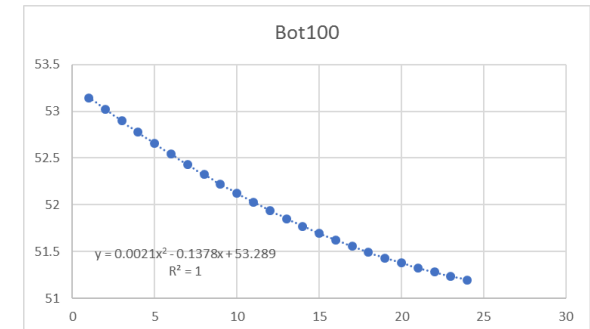
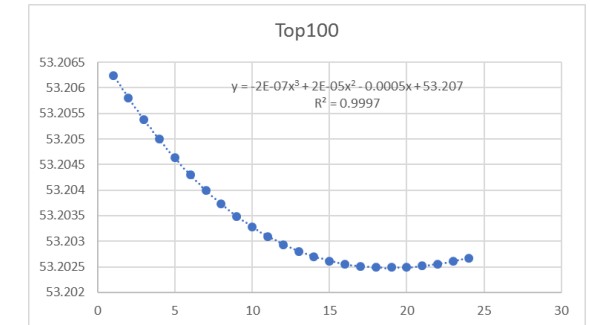
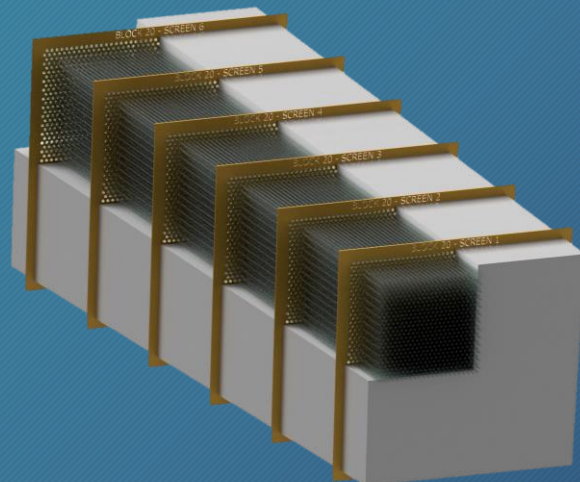
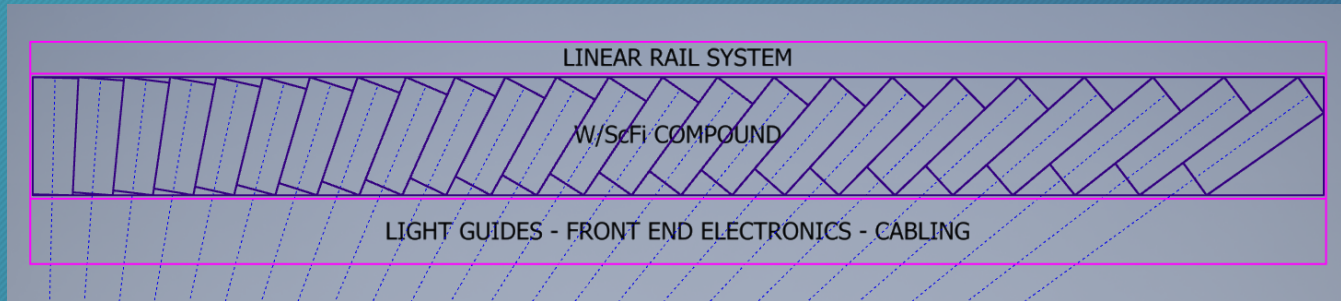
- How far into the block should the first/last screen be? (6 mm)
- Center to center distance between fibers for the first screen? (0.8910 mm)
- Constant area maintained for the triangles created by the center to center lines within a block? (Yes)
- Block area compared to the “ideal area” max PE? ($\pm 0.6858\%$).
- $52 \times 58 = 3016$ fibers



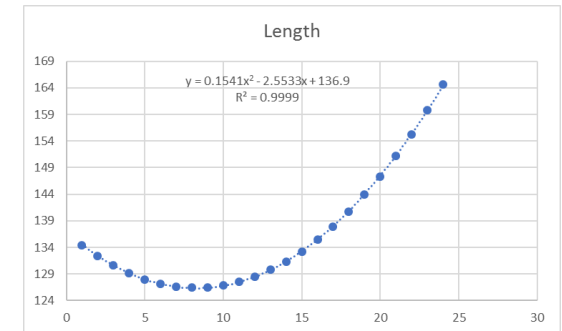
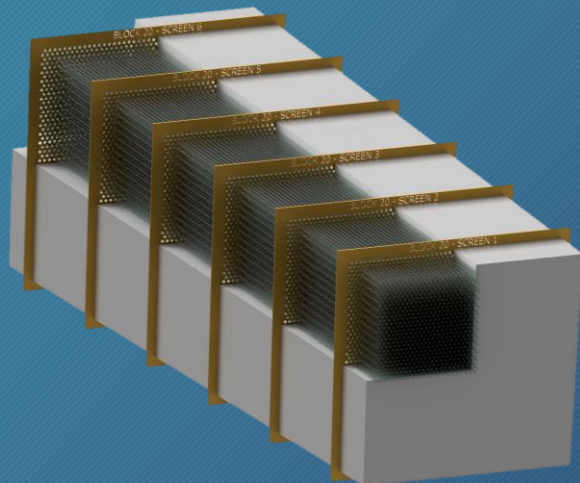
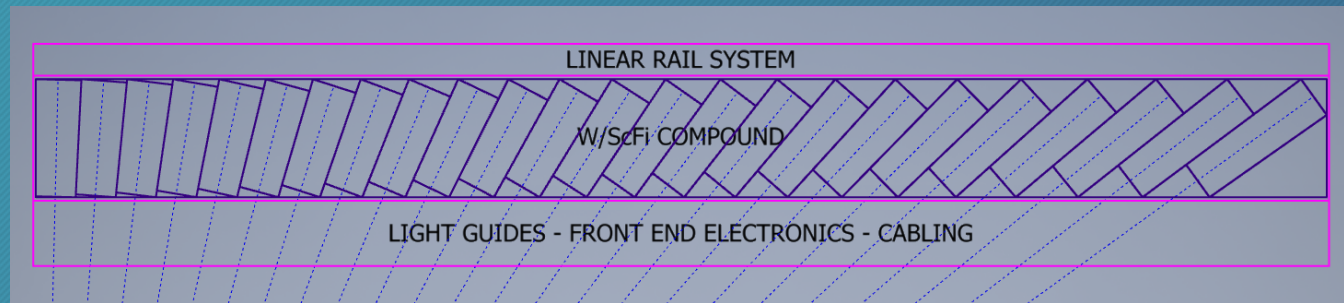
EMCal Dimensions



EMCal Dimensions



EMCal Dimensions



Thank You

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